

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Currently Amended): An apparatus for restoring an aortic valve having an aortic annulus and a sinotubular junction, the apparatus comprising:

a) an aortic annulus stabilizing apparatus device comprising an inner discontinuous band stabilizer having two free ends and an outer discontinuous band stabilizer having two free ends, wherein the inner discontinuous band stabilizer comprises a sewing passage wherein a portion of the inner discontinuous band stabilizer is thinner than surrounding portions of the inner discontinuous band stabilizer; and

b) a sinotubular junction stabilizing apparatus device comprising an inner continuous ring stabilizer and an outer continuous ring stabilizer, wherein the inner continuous ring stabilizer comprises a sewing passage wherein a portion of the inner continuous ring stabilizer is thinner than surrounding portions of the inner continuous ring stabilizer, wherein the outer continuous ring stabilizer is sized and configured to continuously encircle an outer surface of the sinotubular junction, and wherein the inner continuous ring stabilizer is sized and configured for placement along a diameter of an inner surface of the sinotubular junction.

Claims 2-4 (Cancelled)

Claim 5 (Currently Amended): The apparatus of claim 1, wherein ~~at least one of the outer continuous ring stabilizer and the inner continuous ring stabilizer~~ comprises three equally spaced markers on its circumference, ~~which enables determination of an orientation of the continuous sinotubular junction stabilizing device.~~

Claim 6 (Currently Amended): The apparatus of in claim 1, wherein ~~at least one of the outer discontinuous band stabilizer and the inner discontinuous band stabilizer~~ comprises vertical marks about 2 mm from each free end thereof.

Claims 7-12 (Cancelled)

Claim 13 (Currently Amended): A treatment method for aortic valvular regurgitation associated with an aortic valve having an aortic annulus, an aortic lumen and a sinotubular junction, comprising:

implanting an inner discontinuous band stabilizer inside the aortic lumen proximate the aortic annulus of the aortic valve, wherein the inner discontinuous band stabilizer comprises a sewing passage wherein a portion of the inner discontinuous band stabilizer is thinner than surrounding portions of the inner discontinuous band stabilizer;

implanting an outer discontinuous band stabilizer outside the aortic lumen proximate the aortic annulus of the aortic valve;

implanting an inner continuous ring stabilizer proximate an interior surface of the sinotubular junction of the aortic valve, wherein the inner continuous ring stabilizer comprises a sewing passage wherein a portion of the inner continuous ring stabilizer is thinner than surrounding portions of the inner continuous ring stabilizer; and

implanting an outer continuous ring stabilizer proximate an exterior surface of the sinotubular junction of the aortic valve.

Claim 14 (Cancelled)

Claim 15 (Currently amended): The treatment method for aortic valvular regurgitation as set forth in claim 13, wherein ~~at least one of the outer continuous ring stabilizer and the inner continuous ring stabilizer~~ comprises three equally spaced markers on its circumference, ~~which enables determination of an orientation of the continuous sinotubular junction stabilizing device.~~

Claim 16 (Currently amended): The treatment method for aortic valvular regurgitation as set forth in claim 13, wherein ~~at least one of the outer discontinuous band stabilizer and the inner discontinuous band stabilizer~~ comprises vertical marks about 2mm from each free end thereof.

Claims 17-21 (Cancelled)

Claim 22 (Currently amended): The apparatus of claim 1, wherein the apparatus does not have a graft or prosthetic flexible tubular structure connecting the aortic annulus stabilizing deviceapparatus and the sinotubular junction stabilizing deviceapparatus.

Claim 23 (Currently amended): The treatment method for aortic valvular regurgitation as set forth in claim 13, wherein no graft or prosthetic flexible tubular structure is used between the outer discontinuous band stabilizer and the outer continuous ring stabilizer.

Claims 24-26 (Cancelled)

Claim 27 (Previously presented): The apparatus of claim 1 wherein the inner discontinuous band stabilizer, the outer discontinuous band stabilizer, the inner continuous ring stabilizer and the outer continuous ring stabilizer each comprise a synthetic fiber.

Claim 28 (Previously presented): The method of claim 13 wherein the outer continuous ring stabilizer, the inner continuous ring stabilizer, the outer discontinuous band stabilizer, and the inner discontinuous band stabilizer each comprise a synthetic fiber.

Claim 29 (new): A treatment method for aortic valvular regurgitation associated with an aortic valve having an aortic annulus, an aortic lumen and a sinotubular junction, comprising:

implanting an inner discontinuous band stabilizer inside the aortic lumen proximate the aortic annulus of the aortic valve;

implanting an outer discontinuous band stabilizer outside the aortic lumen proximate the aortic annulus of the aortic valve;

implanting an inner continuous ring stabilizer proximate an interior surface of the sinotubular junction of the aortic valve; and

implanting an outer continuous ring stabilizer proximate an exterior surface of the sinotubular junction of the aortic valve, wherein the outer continuous ring stabilizer, the inner continuous ring stabilizer, the outer discontinuous band stabilizer, and the inner discontinuous band stabilizer each comprise a synthetic fiber.

Claim 30 (new): A treatment method for aortic valvular regurgitation associated with an aortic valve having an aortic annulus, an aortic lumen and a sinotubular junction, comprising:

implanting an inner discontinuous band stabilizer inside the aortic lumen proximate the aortic annulus of the aortic valve, wherein the inner discontinuous band stabilizer comprises vertical marks about 2mm from each free end thereof;

implanting an outer discontinuous band stabilizer outside the aortic lumen proximate the aortic annulus of the aortic valve, wherein the outer discontinuous band stabilizer comprises vertical marks about 2mm from each free end thereof;

implanting an inner continuous ring stabilizer proximate an interior surface of the sinotubular junction of the aortic valve; and

implanting an outer continuous ring stabilizer proximate an exterior surface of the sinotubular junction of the aortic valve.